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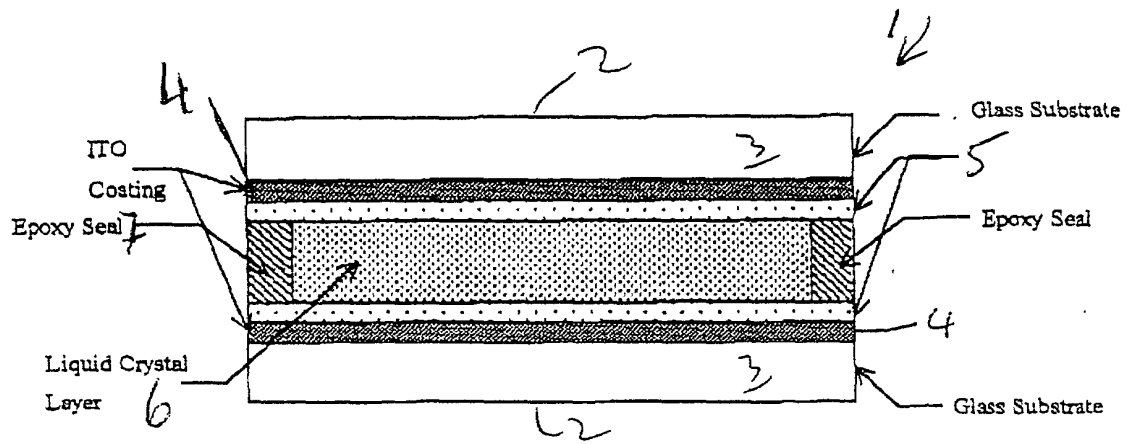


Fig. 1 Structure of passively driven liquid crystal display

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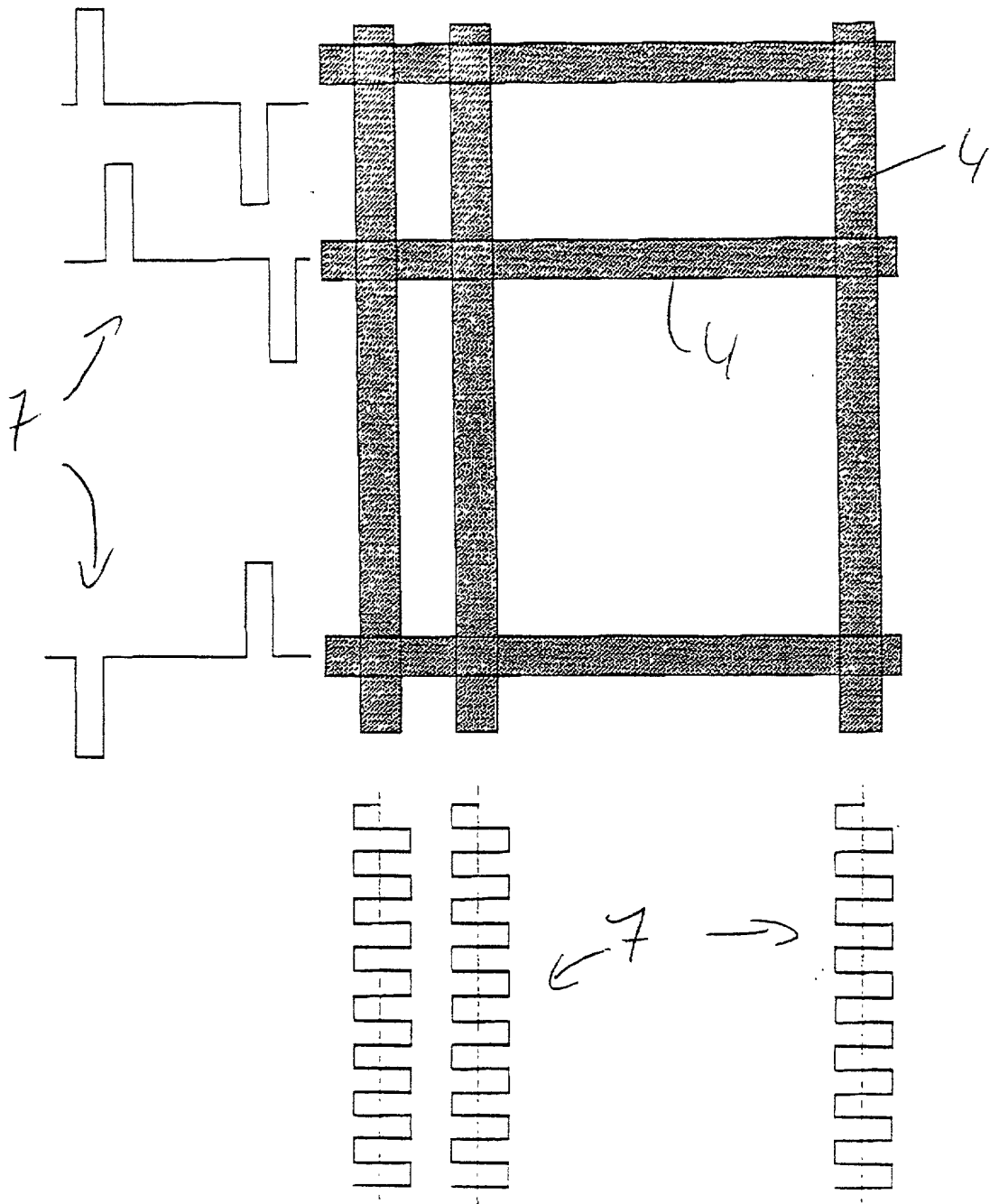


Fig. 2 Example waveform applied to the common and segment electrodes

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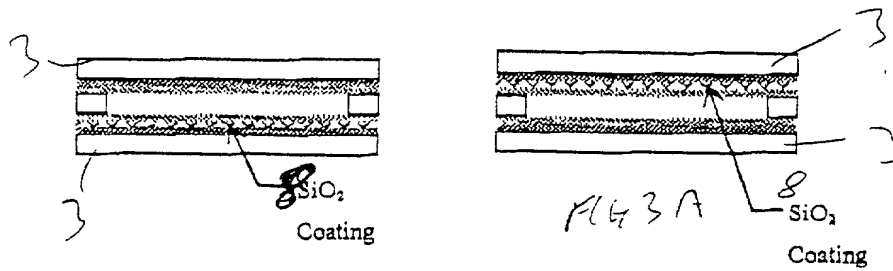


Fig. 3 Coating of silicon dioxide applied for better electrical isolation between the two ITO surfaces

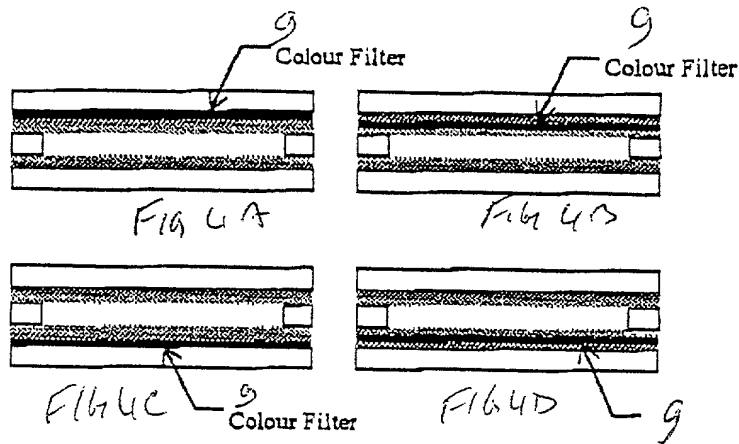


Fig. 4 Color filter material applied on/under the ITO layer

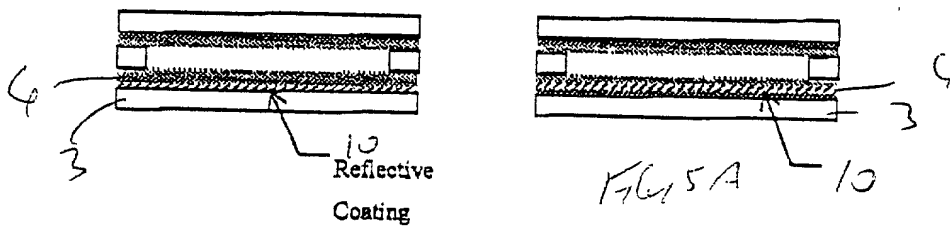


Fig. 5 reflective coating applied on/under the ITO layer of the rear substrate

000013007 000001

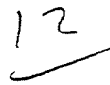
[illegible]

Fig. 7 Signal waveform incorporating row inversion scheme for actively driven liquid crystal display

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+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-

Frame N

17
↙

-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+

Frame N+1

17
↙

Fig. 10 Polarities of resulting fields applied to pixels for two consecutive frames adopting row inversion scheme

+	-	+	-	+	-
+	-	+	-	+	-
+	-	+	-	+	-
+	-	+	-	+	-
+	-	+	-	+	-
+	-	+	-	+	-

Frame N

18
|

-	+	-	+	-	+
-	+	-	+	-	+
-	+	-	+	-	+
-	+	-	+	-	+
-	+	-	+	-	+
-	+	-	+	-	+

Frame N+1

18
|

Fig. 11 Polarities of resulting fields applied to pixels for two consecutive frames adopting column inversion scheme

TABLE 10-10-10

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+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+

Frame N

19

-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-

Frame N+1

19

Fig. 12 Polarities of resulting fields applied to pixels for two consecutive frames adopting pixel inversion scheme

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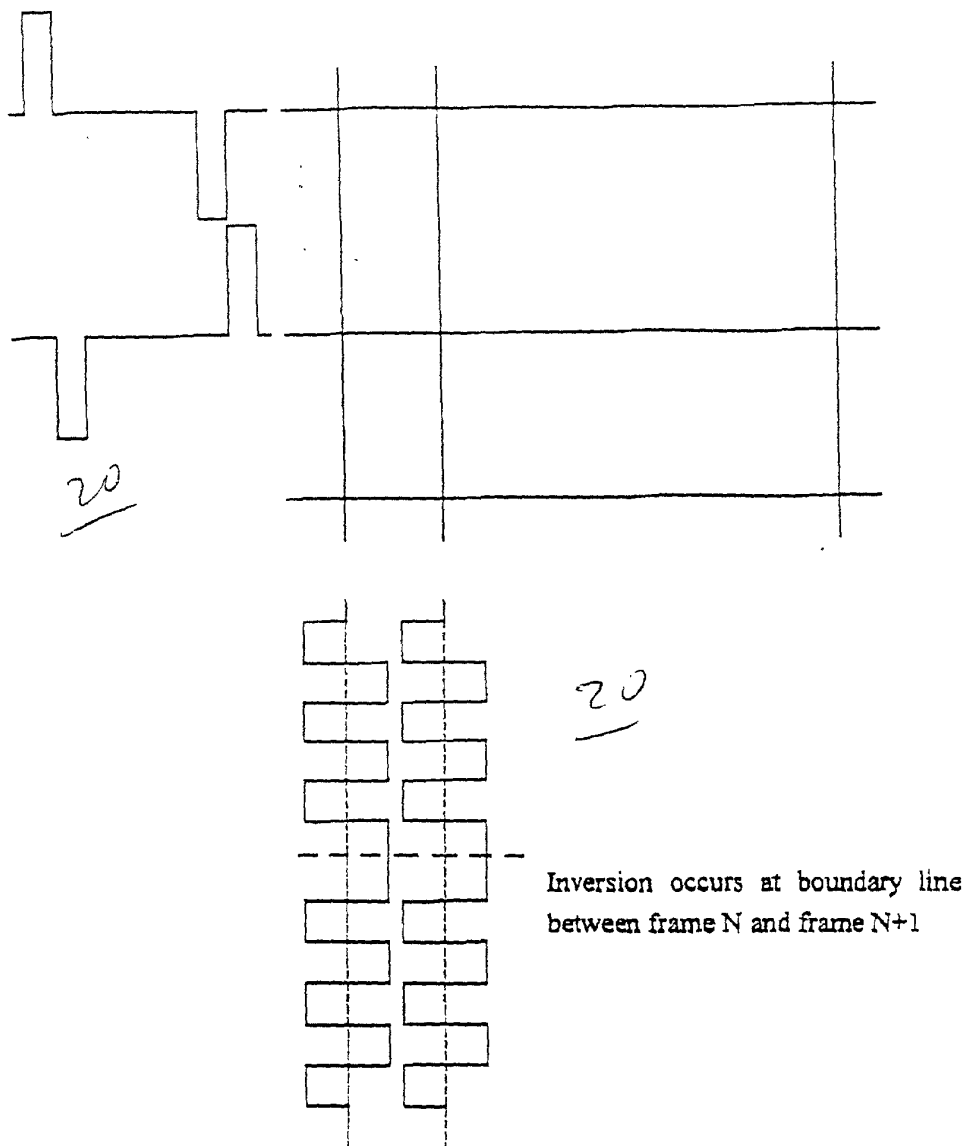
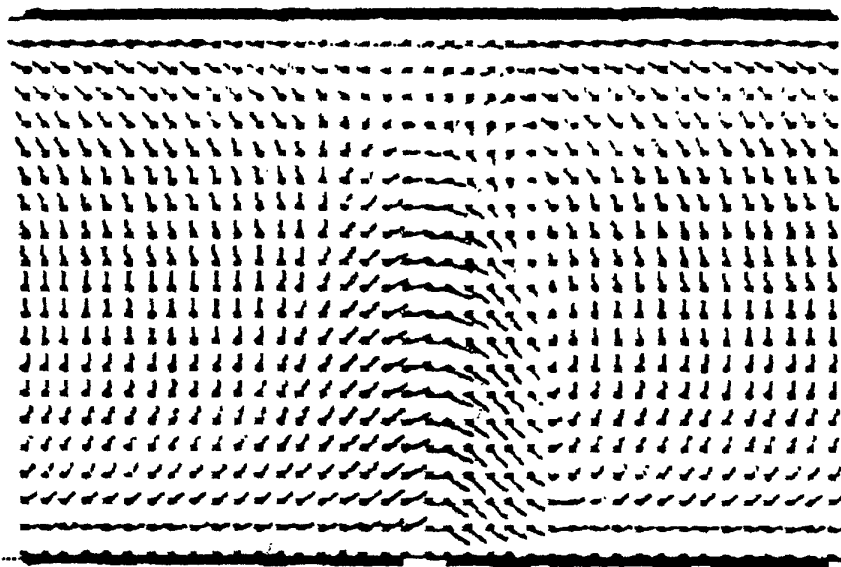


Fig. 13 Signal waveform incorporating row inversion scheme for passively driven liquid crystal display

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Fig. 14 2D director configuration of two pixels driven in column inversion mode

108220 20612500

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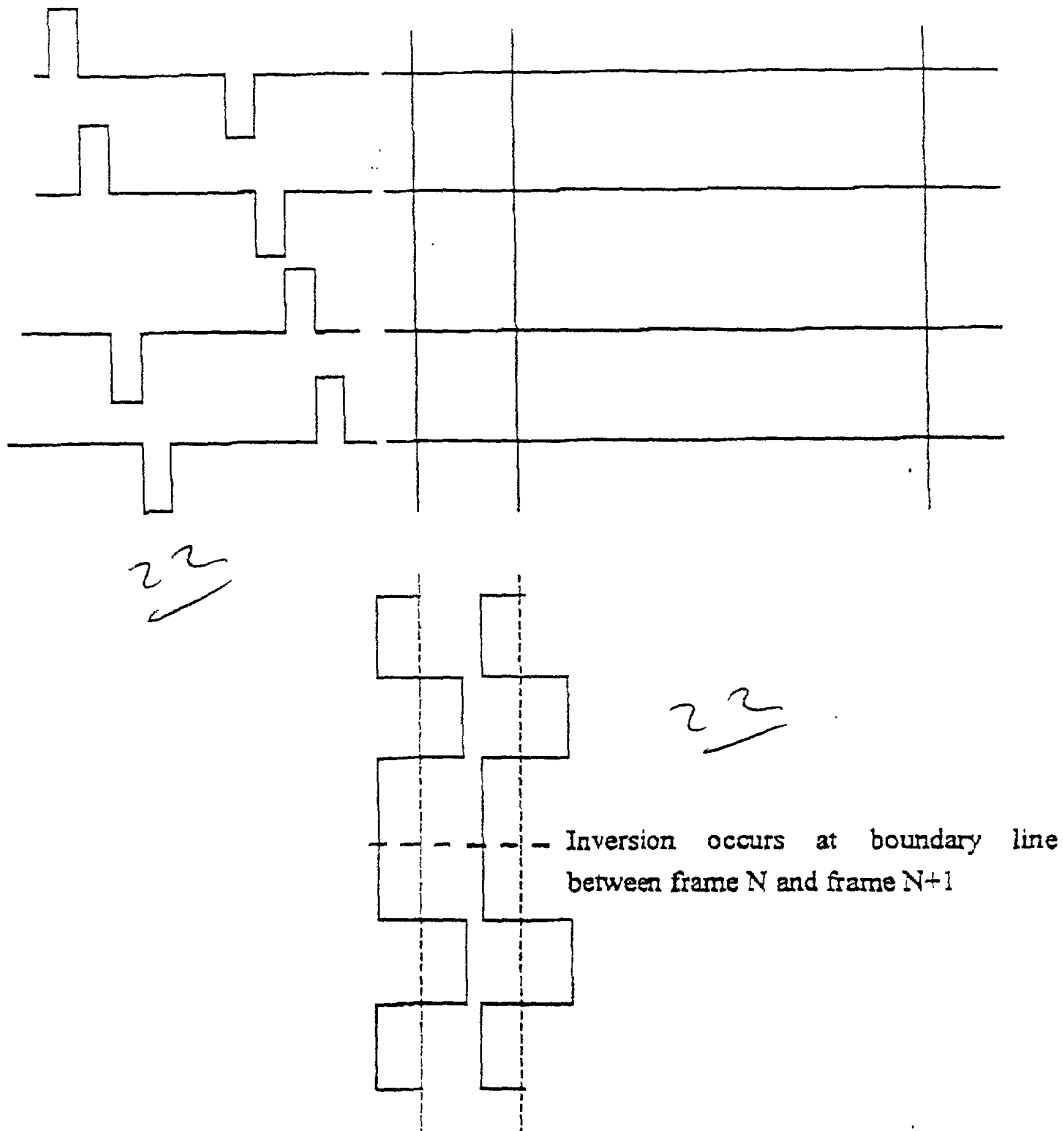


Fig. 15 Signal waveform incorporating 2-row inversion scheme for passively driven liquid crystal display

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+	+	+	+	+	+
+	+	+	+	+	+
-	-	-	-	-	-
-	-	-	-	-	-
+	+	+	+	+	+
+	+	+	+	+	+

Frame N

23

-	-	-	-	-	-
-	-	-	-	-	-
+	+	+	+	+	+
+	+	+	+	+	+
-	-	-	-	-	-
-	-	-	-	-	-

Frame N+1

23

Fig. 16 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2-row inversion scheme

+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+

Frame N

24

-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-

Frame N+1

24

Fig. 17 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2-column inversion scheme

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+	+	-	-	+	+
+	+	-	-	+	+
-	-	+	+	-	-
-	-	+	+	-	-
+	+	-	-	+	+
+	+	-	-	+	+

Frame N

25

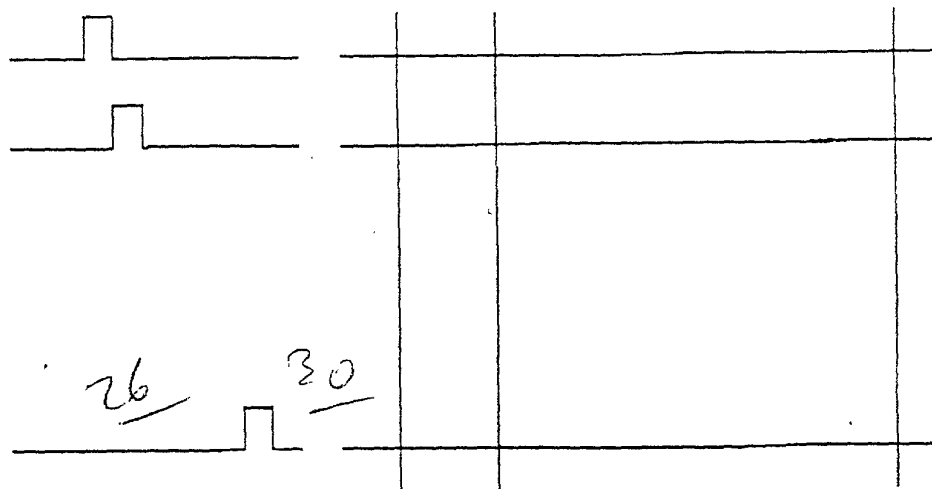
-	-	+	+	-	-
-	-	+	+	-	-
+	+	-	-	+	+
+	+	-	-	+	+
-	-	+	+	-	-
-	-	+	+	-	-

Frame N+1

25

Fig. 18 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2x2-pixel inversion scheme

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Switching Signal

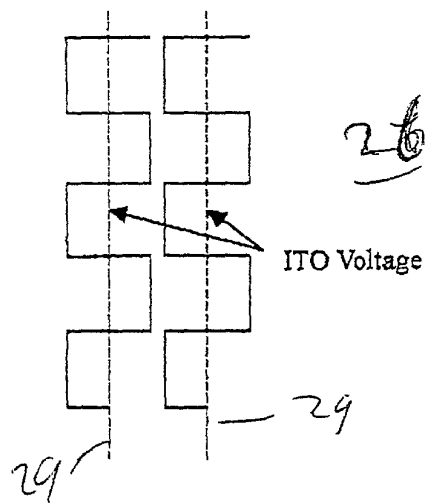


Fig. 19 Signal waveform incorporating 2-row inversion scheme for actively driven liquid crystal display

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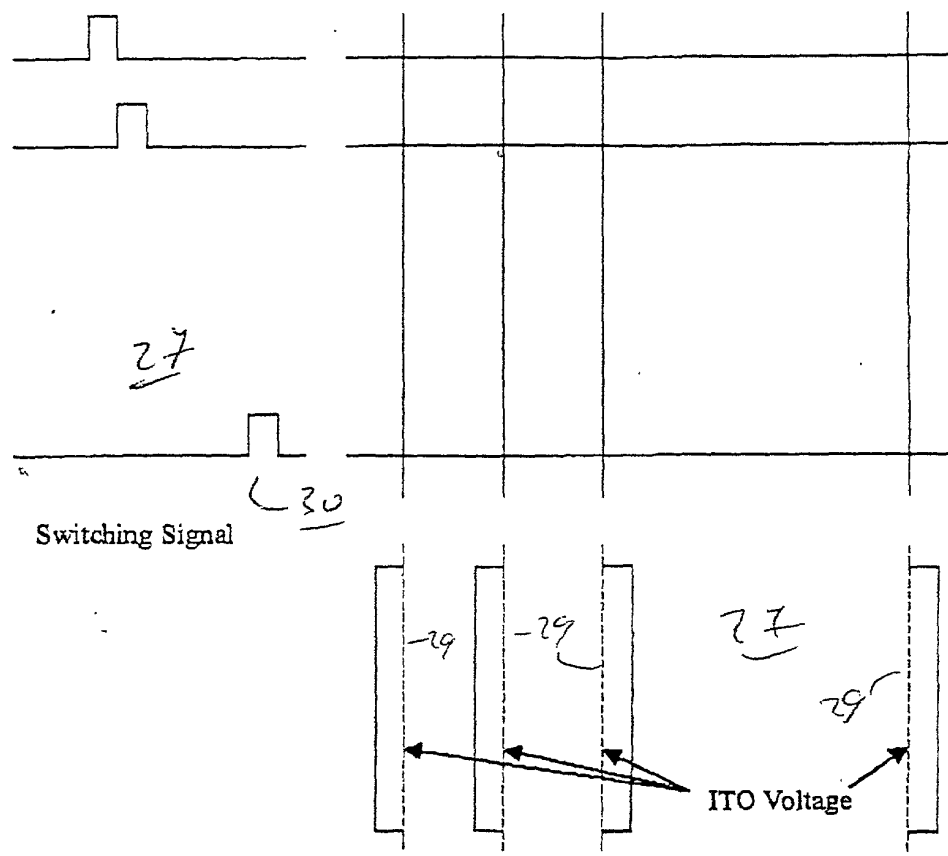


Fig. 20 Signal waveform incorporating 2-column inversion scheme for actively driven liquid crystal display

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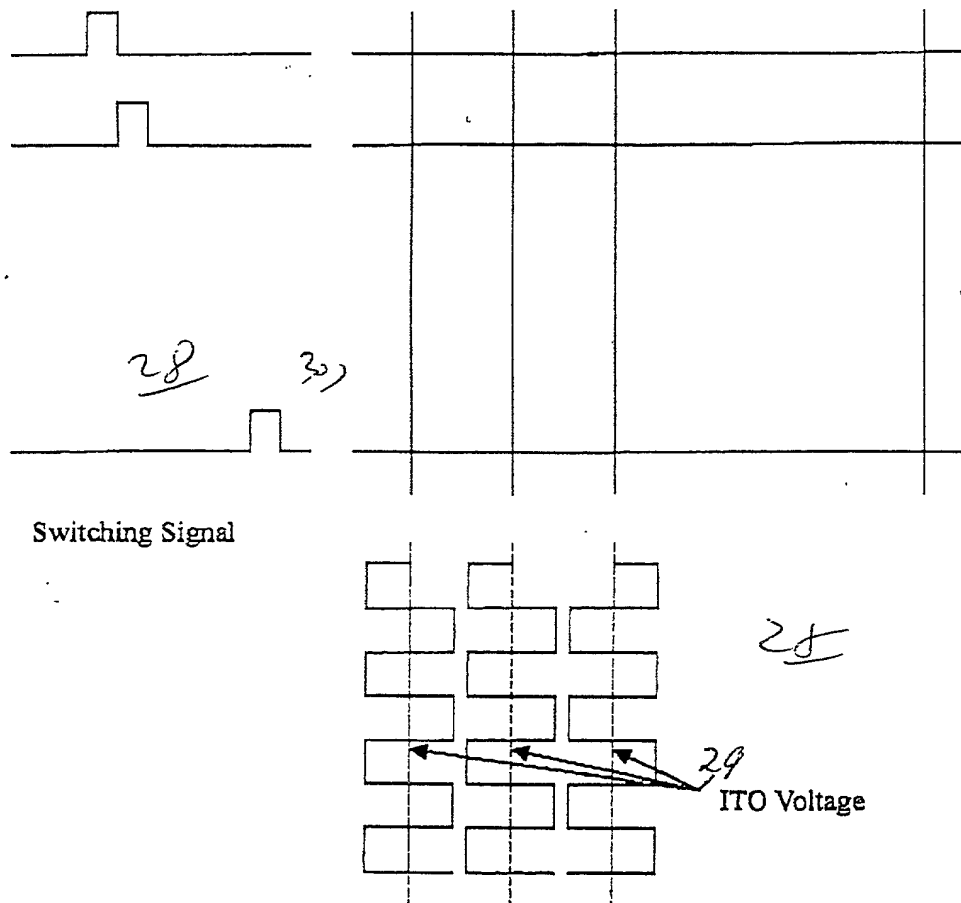


Fig. 21 Signal waveform incorporating 2x2-pixel inversion scheme for actively driven liquid crystal display